

electronic order data that have been rejected.

16. (Amended) A computer implemented method of processing electronic sales order data before it is transmitted to an order processing system, comprising the steps of:

receiving electronic sales order data for pre-processing the electronic sales order data prior to being transmitted to the order processing system;

translating the electronic sales order data to an internal format;

transmitting the electronic sales order data to an interface system, wherein the interface system performs an availability check to determine what portion of the electronic sales order data that can be satisfied; and

if the availability check indication is to transmit, transmitting the designated portions of the internal format data to the order processing system.

REMARKS

Claims 1, 3, 4, 6, 8, 9, 11 and 13-24 are currently pending in the present application. By this amendment, claims 1, 3, 6, 11 and 16 are amended for the Examiner's consideration. Attached hereto is a separate sheet entitled "Clean Copy of Claims" showing a clean copy of the amended claims. Support for the amendment(s) is provided in at least Figures 2 and 3 and at page 10, lines 11-25 and page 12, line 21 to page 14, line 7 of the present specification. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Objected Claims

Claims 3, 6 and 11 were objected to on the grounds that some of the elements were inherent in the independent claim and thus did not further limit the independent claim.

Claims 3, 6 and 11 are amended in order to delete reference to the redundant phraseology.

Applicants now request withdrawal of the objection.

Prior Art Rejections

The Examiner rejected claims 1-24 under 35 U.S.C. § 102(e) over U.S. Patent No. 6,058,373 to Blinn et al. or U.S. Patent No. 6,023,683 to Johnson et al. These rejections are respectfully traversed.

In rejecting the claims, the Examiner asserted that

“In response to the argument that the system is for “pre-processing orders”, rather than for “processing orders”, the recitation of “pre-processing” has not been given patentable weight because the recitation occurs in the preamble. The preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone.”

First, Applicants bring the Examiner’s attention to claim 21. In claim 21, the body and not the preamble of the claim recites the pre-processing feature. By way of specific example, the body of claim 21 recites, in part,

“... a computer usable medium having computer readable program code embodied in the medium for pre-processing orders before they are transmitted to an order processing system, the computer program product....”

This being the case, Applicants submit that at least claim 21 includes the pre-processing element in the body of the claim and should be accorded patentable weight.

As to the remaining independent claims 1 and 16, Applicants submit that the elements of the preamble should be given patentable weight. This is based on the fact that the body of these claims inherently refer back to or depend from the preamble for completeness.

Specifically, both claims 1 and 16 recite transmitting the designated portions of the internal format data to the order processing system. This can only be performed if there is pre-processing performed to provide the transmitted portions. Thus, the arguments relating to the pre-processing of information in the independent claims should be considered and given patentable weight.

Despite the above argument, Applicants amend claims 1 and 16 to now recite in the body of the respective claims the pre-processing of the electronic sales order. Applicants make this amendment in order to expedite the prosecution of the present application, and not for reasons of patentability. This is especially true in view of the fact that these features were inherent in the presently claimed subject matter. This, like claim 21, distinguishes over both the Bliss and Johnson references, as discussed below.

Now discussing the specifics of the rejections presented by the Examiner, the present invention relates to an integrated system and method for pre-processing electronic commerce requests prior to being sent to an order processing system. This pre-processing system and method corrects erroneous electronic data requests before such requests are sent to the order processing system, as well as rejects electronic data requests when certain criteria specified within the electronic data request cannot be satisfied. The pre-processing system and method also plans and schedules to determine if a given material is available for delivery in a given quantity and delivery date. Pre-processing, by filtering out bad requests, substantially speeds up order fulfillment systems. However, the pre-processing does not perform order fulfillment. (Order fulfillment is performed by an order processing system.)

The claimed invention recites a pre-processing system which takes the data that will later be passed to an order processing system after making various checks on the data. One function of a pre-processor is the conversion of incoming data into a format which is used by an order processing system. Being more specific and referring to at least Figure 2, to accomplish the above objectives and advantages, an order interceptor system is provided which includes an order interceptor for pre-processing electronic sales orders (ESOs) before they are posted to the order processing system 209. The order interceptor 201 includes a translator 202 for translating a customer's order data into an internal format. The order data is received via a standard EDI format transmission 203. After translating the customer's order data into an internal format, the order interceptor 201 begins to process the data by customer specific business rules contained in the business rules database 210. For example, a new sales order request from a high-tiered customer can be configured for manual review only under certain conditions such as, for example, if the requestor falls under minimum order quantity levels. If the order interceptor 201 determines that an ATP check is needed, the order

interceptor 201 will interface with ATP system 204 to collect the needed data from the data translator 205. The ATP system 204 serves as a planning and forecast engine that determines if a material is available for a given quantity and delivery date. If the order interceptor 201 determines that any of the business rules contained in the business rules database 210 fail, or there are any other processing problems, the order interceptor 201 interfaces with a sales order workbench 206 which allows corrections to be made. If pre-processing calls for the order to be rejected, the order interceptor 201 interfaces with the reject acknowledgment system 207 to perform the reject operation so that the ESO request is not processed by the order processing system 209. After the order interceptor 201 has pre-processed the customer's data, a router 208 routes the data to the designated order processing system 209.

In contrast to the present invention, both the Blinn and Johnson references disclose order processing systems. These references clearly do not show pre-processing systems, like recited in the presently claimed invention. Also, the systems of both Blinn and Johnson do not show a workbench or reject function as recited in the claimed invention, nor do these references provide a check to determine whether portions of the ESO can be satisfied by the processing operation, itself. In whole, neither of these reference can either provide the same advantages as the claimed invention, i.e., correct or filter erroneous electronic data requests, reject electronic data requests, plan and schedule material availability or speed up order fulfillment systems. For these reasons, the claimed invention is clearly distinguishable over the prior art of Blinn or Johnson.

Specifically rebutting the Examiner's arguments, Figures 13 and 15 of Blinn show an ordering system. For example, in block 1302 of Blinn a "Consumer Accesses Merchandizing System" is shown. Also, in block 1304 a "Consumer Views Virtual Store" is provided and in block 1340 a "Fulfill Order" is shown. Figure 15 shows how the order processing system of Blinn processes the order. All of the steps in both Figures 13 and 15 show processing of the data, not pre-processing of the data.

More specifically, Figure 13 illustrates a flow chart of the sequence of states which occur when a consumer accesses the electronic merchandising system 100. In state 1302, the consumer accesses the electronic merchandising system 100. In state 1304, the consumer views the virtual store displayed by the dynamic page generator 120. This view may show

the items to be purchased by the consumer. In state 1306, the consumer browser 110 transmits the item's URL to the dynamic page generator 120. In state 1308, an item blackboard 352 is processed to obtain information about the selected item. (A detailed flow chart of state 1308 is illustrated in Figure 14 which shows the ordering of an item.) In state 1320, when the user selects the shopping cart button 412, the consumer browser 110 transmits the order plan URL to the action manager 122. In state 1322, an order to obtain information and a subtotal of the order is provided. (Figure 15 shows a detailed flow chart of the steps performed by the order plan action 346 in state 1322.) In state 1324, the order manager 322 retrieves the item key-value pairs and stores them in the order table 304. In state 1324, the dynamic page generator 120 creates the shopping cart HTML page 400. Ultimately, in step 1340, the order is fulfilled after a purchase is displayed in the previous remaining steps.

Thus, Blinn is specifically directed to an ordering process and not to any preprocessing steps as recited in the claimed invention. Blinn does not show a workbench, nor does this reference show filtering bad requests prior to the order process. Also, Blinn does not show correcting erroneous requests or other features of the claimed invention.

Similarly, Johnson also discloses an order processing system designed to fill orders made from catalogs. In particular, Johnson is directed to an electronic sourcing method and system that provides a user with the capability of searching a database containing data (product/vendor identification, and other product information) relating to items available from at least two vendor product catalogs, and the capability of transferring the product information for desired catalog items obtained as a result of the search to a requisition/purchasing system for use in generating a requisition including entries for the desired catalog items. Johnson is also capable of creating an order list including desired catalog items located as the result of such a database search. To provide these objectives, Johnson shows a computer that maintains a catalog database of data including product information relating to catalog items available from vendor product catalogs, and a means for generating a requisition including at least one requisitioned item. Information at least partially identifying an item desired to be requisitioned is entered by a user, and utilized for searching the database for catalog items matching that information and for selecting at least one catalog item located as a result of the search. Data identifying selected catalog items are

communicated to the requisition building module which generates a requisition including entries for items corresponding to the selected catalog items. Additionally, Johnson may check the availability in one or more inventory locations of the corresponding desired catalog items, and may generate one or more purchase orders for desired items from inventory locations stocking the items. (See, cols. 2 and 3.) Johnson, thus, discloses a system as inapplicable as that of Blinn to the claimed invention.

In view of the above discussion, Applicants reiterate that the claimed invention is a pre-processor which works in conjunction with, but not as a replacement for, an order processing system. The pre-processing does not fill the order; the pre-processing checks to see if the order can or cannot be filled. In this way, claimed invention will prevent an order processing system from attempting to fill an order that cannot be filled thus streamlining the ordering process and the like. On the other hand, both Blinn and Johnson are specifically directed towards processing systems which do not provide a reject, workbench, preprocessing, or other claimed features. Accordingly, Applicants submit that the §102 rejections should now be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Charge any deficiencies and credit any overpayment of fees to Deposit Account No. 09-0456.

Respectfully submitted,



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